

EQUIVALENT TEMPERATURE

During the summer and winter months many decisions are made which depend upon the temperatures and the extremes which might be expected. Not only do we dress according to the thermometer, but we use it to anticipate the feed requirements and care of livestock. If we have to be out-of-doors, as is the case with children who have to stand waiting for a school bus, we soon find that the temperature alone gives too little information. Should the temperature be zero with a light wind, we would not be as cold as with a strong wind. Thus if we have an idea of how much wind increases the chilling effect of temperature on the human body, we can get a better estimate of how “cold” it really is. Humidity along with summer temperatures can cause fatigue or heat stroke. The apparent temperature gives us a better estimate of how “hot” it really is.

APPARENT TEMPERATURE CHART

Rel Humid %	Air Temperature (Degrees Fahrenheit)					
	85	90	95	100	105	110
20	82	87	93	99	105	112
30	84	90	96	104	113	123
40	86	93	101	110	123	137
50	88	96	107	120	135	150
60	90	100	114	132	149	
70	93	106	124	144		
80	97	113	130			
90	102	122				
100	108					

CATEGORY	APPARENT TEMP	HEAT SYMPTOMS
I	> 130 degrees	Heatstroke imminent
II	105 to 130 degrees	Sunstroke likely, heatstroke possible
III	90 to 105 degrees	Sunstroke possible
IV	80 to 90 degrees	Fatigue possible

WIND CHILL CHART

Wind Speed MPH	Air Temperature (Degrees Fahrenheit)																
	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	33	27	21	16	12	7	1	-6	-11	-15	-20	-26	-31	-35	-41	-47	-54
10	21	16	9	2	-2	-9	-15	-22	-27	-31	-38	-45	-52	-58	-64	-70	-77
15	16	11	1	-6	-11	-18	-25	-33	-40	-45	-51	-60	-65	-70	-78	-85	-90
20	12	3	-4	-9	-17	-24	-32	-40	-46	-52	-60	-68	-76	-81	-88	-96	-103
25	7	0	-7	-15	-22	-29	-37	-45	-52	-58	-67	-75	-83	-89	-96	-104	-112
30	5	-2	-11	-18	-26	-33	-41	-49	-56	-63	-70	-78	-87	-94	-101	-109	-117
35	3	-4	-13	-20	-27	-35	-43	-52	-60	-67	-72	-83	-90	-98	-105	-113	-123
40	1	-4	-15	-22	-29	-36	-45	-54	-62	-69	-76	-87	-94	-101	-107	-116	-128
45	1	-6	-17	-24	-31	-38	-46	-54	-63	-70	-78	-87	-94	-101	-108	-118	-128
50	0	-7	-17	-24	-31	-38	-47	-56	-63	-70	-79	-88	-96	-103	-110	-120	-128

WIND CHILL (Equivalent Temperature)